

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Currently amended claims are shown with additions underlined and deletions in ~~strikeout text~~ except double brackets may be placed before or after the deleted characters to show deletion of five or fewer characters.

1. (CURRENTLY AMENDED) A machine part for a casting machine for casting an article from a molten aluminum alloy, comprising:

a steel base;

a Ni alloy layer formed on a surface of the base; and

~~[[and]] titanium carbide (TiC) densely bonded in a particulate state [[only]] to the surface of the Ni alloy layer, wherein the TiC particles are partly exposed on the surface of the Ni alloy layer and repel molten aluminum alloy[.], the TiC particles being formed by applying TiC powder on a surface of the Ni alloy layer and placing the Ni alloy layer, together with the TiC powder, in a vacuum heating oven and heating them under vacuum to a temperature at which a liquid phase generates from the Ni alloy, thereby densely bonding the TiC particles to the surface of the Ni alloy layer.~~

2. (CANCELLED)

3. (PREVIOUSLY PRESENTED) The metal material for parts of a casting machine according to claim 1, wherein the gaps in the TiC particles are filled in with fine ceramic particles comprising at least one of boron nitride (BN), alumina (Al₂O₃) and zirconia (ZrO₂).

4. (PREVIOUSLY PRESENTED) The metal material for parts of a casting machine according to claim 1, wherein the Ni alloy has the composition of 2.6 to 3.2% of B, 18 to 28% of Mo, 3.6 to 5.2% of Si and 0.05 to 0.22% of C, with the remainder being Ni and unavoidable impurities.

5. (CURRENTLY AMENDED) A molten aluminum alloy-contact member for a casting machine for casting an article from a molten aluminum alloy, comprising:

a body, composed of a steel base;
[[and]] a nickel alloy layer formed on a surface of the base on the side to be in direct contact with a molten aluminum alloy; and
titanium carbide (TiC) densely bonded in a particulate state [[only]] to the surface of the Ni alloy layer, wherein the TiC particles are partly exposed on the surface of the Ni alloy layer and repel molten aluminum alloy[.], the TiC particles being formed by applying TiC powder on a surface of the nickel alloy layer and placing the nickel alloy layer, together with the TiC powder, in a vacuum heating oven and heating them under vacuum to a temperature at which a liquid phase generates from the Ni alloy, thereby densely bonding the TiC particles to the surface of the Ni alloy layer.

6. (CANCELLED)

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7. (PREVIOUSLY PRESENTED) The molten aluminum alloy-contact member according to claim 5, wherein the gaps in the TiC particles are filled in with fine ceramic particles comprising at least one of boron nitride (BN), alumina (Al_2O_3) and zirconia (ZrO_2).

8. (ORIGINAL) The molten aluminum alloy-contact member according to claim 5, wherein the Ni alloy has the composition of 2.6 to 3.2% of B, 18 to 28% of Mo, 3.6 to 5.2% of Si and 0.05 to 0.22% of C, with the remainder being Ni and unavoidable impurities.

9. (PREVIOUSLY PRESENTED) The molten aluminum alloy-contact member according to any one of claims 5, 7 or 8, wherein said member is a machine part having a surface to be in direct contact with a molten aluminum alloy.

10. (CURRENTLY AMENDED) A method for producing a molten aluminum alloy-contact member for a casting machine for casting an article from a molten aluminum alloy, comprising the steps of:

forming a Ni alloy layer on a surface of a steel base, thereby forming a body;
burying the body in TiC powder; and
placing the body, together with the TiC powder, in a vacuum heating oven and heating them under vacuum to a temperature at which a liquid phase generates from the Ni alloy, thereby densely bonding the TiC particles [[only]] to the surface of the Ni alloy layer, the TiC particles repelling molten aluminum alloy.

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11. (ORIGINAL) The method for producing a molten aluminum alloy-contact member according to claim 10, wherein after the bonding of the TiC particles to the Ni alloy layer, the member is subjected to a process comprising applying a slurry of a mixture of a binder and a fine ceramic powder comprising at least one of boron nitride (BN), alumina (Al_2O_3) and zirconia (ZrO_2) to the TiC particles, and burning the ceramic powder into the surface of the member.

12. (ORIGINAL) The method for producing a molten aluminum alloy-contact member according to claim 10, wherein the average particle diameter of the TiC powder is in the range of 10-500 nm.

13. (ORIGINAL) The method for producing a molten aluminum alloy-contact member according to claim 10, wherein the Ni alloy layer is formed by thermal spraying of a Ni alloy having the composition of 2.6 to 3.2% of B, 18 to 28% of Mo, 3.6 to 5.2% of Si and 0.05 to 0.22% of C, with the remainder being Ni and unavoidable impurities.

14. - 19. (CANCELLED)